Site: Peaches					**Overall Confidence Rating: m**			
Background: Agricultural Statistics Board, NASS, USDA, January, 1998, p. 50: Bearing Acreage, peaches: 167, 900 acres.								
Organophosphate	% Treated		# Applications		Rate (lb AI/A)		PHI (days)	
Pesticides	Max[15]	Avg[15]	Max[13]	Avg[15, 2]	Max[13]	Avg[15, 2]	Min[13]	Avg[2, 15]
azinphos-methyl	35	30	NS	2.5	2.8	1.38	21	35
chlorpyrifos	29	21	NS	1.4	4	1.3	14	60
diazinon	30	15	NS	1.1	8.75	1.7	21	45
fenamiphos	3	2.5	NS	---	7.5	---	45	---
malathion	4.6	2.3	NS	1.7	15.77	1	21	---
methidathion	13	10	NS	1	3	1.50	---	---
methyl parathion	69	46	NS	1	2	1	14	30
naled	1	< 1	NS	1	3.75	3.1	30	---
phosmet	22	13	NS	2.4	3	1.2	14	20

Confidence Rating: H= high confidence = data from several confirming sources; confirmed by personal experience
M = medium confidence = data from only a few sources; may be some conflicting or unconfirmed info.
L = low confidence = data from only one unconfirmed source

Organophosphate Target Pests for Peaches in the North Eastern Region (Primary pests controlled by the OP's)[1, 3, 4, 5]	
Major	Bugs (Tarnished Plant, Stink, and Other), Moth (Oriental Fruit and Tufted Apple Bud), Plum Curculio
Moderate	Borer (Peach tree, Lesser Peach Tree, and American Plum), Leafroller (Obliquebanded)
Minor	

Major = 20+% of all OP usage on pest; Moderate = 5-20% of all OP usage on pest; Minor =<5% of all OP usage on pest

Organophosphate Target Pests for Peaches in the North Central Region (Primary pests controlled by the OP's)[1, 6]	
Major	Moth (Oriental Fruit)
Moderate	Plum Curculio, Bug (Tarnished Plant)
Minor	Beetle (Rose Chafer and Japanese), Aphids (Green Peach)

Major = 20+% of all OP usage on pest; Moderate = 5-20% of all OP usage on pest; Minor =<5% of all OP usage on pest

Organophosphate Target Pests for Peaches in the South Eastern Region (Primary pests controlled by the OP's)[1, 7, 8, 9]	
Major	Moth (Oriental Fruit), Bug (Tarnished Plant, Stink, and Other)
Moderate	Plum Curculio
Minor	

Major = 20+% of all OP usage on pest; Moderate = 5-20% of all OP usage on pest; Minor =<5% of all OP usage on pest

Organophosphate Target Pests for Peaches in the Western Region (Primary pests controlled by the OP's)[1, 11]	
Major	Borer (Peach Twig, American Plum and Prune Limb), Scale (San Jose), Moth (Oriental Fruit)
Moderate	
Minor	

Major = 20+% of all OP usage on pest; Moderate = 5-20% of all OP usage on pest; Minor =<5% of all OP usage on pest

Organophosphate Target Pests for Peaches in the Pacific North Region (Primary pests controlled by the OP's)[1, 12]	
Major	Moth (Oriental Fruit), Borer (Peach Twig, Shothole, and Peachtree)
Moderate	
Minor	

Major = 20+% of all OP usage on pest; Moderate = 5-20% of all OP usage on pest; Minor =<5% of all OP usage on pest

Sources:

1. Proprietary EPA market share information.
2. QUA+ - Michigan. 1997.
3. Pennsylvania Tree Fruit Production Guide. 1996-1997. Penn State Cooperative Extension Service. The Pennsylavania State University, University Park, PA.
4. New Jersey Commercial Tree Fruit Production Guide. 1997. Rutgers Cooperative Extension, N. J. Agricultural Experiment Station, Rutgers, The State University of New Jersey, New Brunswick, NJ. Publication E002J.
5. Pest Management Recommendations for Commercial Tree-Fruit Production. 1997. Cornell Cooperative Extension, Cornell University, Ithaca, NY.
6. Fruit Spraying Calendar for Commercial Fruit Growers. 1997. Michigan State University Extension. Michigan State University, East Lansing, MI. Bulletin E-154.
7. The 1997 North Carolina Agricultural Chemicals Manual. 1997. North Carolina State University, Raleigh, NC.
8. 1996 Commercial Peach Pest Management Guide. 1996. Clemson University Cooperative Extension Service, Clemson University, Clemson, SC. Publication IC72.
9. 1997 Commercial Peach Integrated Crop Management Guide. 1997. Cooperative Extension, University of Georgia.
10. Insect and Disease Control on Peaches, Apricots, Nectarines, and Plums. 1996. Texas Agricultural Extension Service, Texas A&M University, College Station, TX.
    Publication B-1689.
11. Peach and Nectarine Pest Management Guidelines. 1996. UCPMG Publication 10. IPM Education and Publications, University of California, Davis.
12. 1998 Crop Protection Guide for Tree Fruits in Washington. 1998. Cooperative Extension, Washington State University, Pullman, WA. Publication EB0419.
13. Label Use Information System (LUIS) Version 5.0, EPA.
14. The All-Crop, Quick Reference Insect Control Guide (1997), Meister Publishing Company
15. EPA Crop Profile QUA.

Date: 01/22/99

Site: Peaches
Region: Western (CA)

Pest[1, 2, 3]	Organophosphate[1, 2, 3]	Efficacy	Mkt[1]	Class	Alt. Pesticide List[1, 2, 3]	Efficacy	Mkt[1]	Constraints of Alternatives[2]
Timing: Pre-Bloom								
Borer (Peach Twig, American Plum, and Prune limb) (Major)	azinphos-methyl	---	High	C	carbaryl	---	Lo	Carbamates or Pyrethroids kill beneficial and/or nontarget organisms and may induce other pest problems.
	chlorpyrifos	---	Lo	P	esfenvalerate	---	Lo	
	diazinon	---	High	P	permethrin	---	High	
	malathion	---	Lo	O	Bacillus thuringiensis	---	Lo	
	methidathion	---	Lo	O	formetanate hydrochloride	---	Lo	
	methyl parathion	---	Lo	O	petroleum oil	---	Lo	
	phosmet	---	Lo					
Scale (San Jose) (Major)	chlorpyrifos	---	Lo	O	insecticidal soap	---	Lo	Petroleum oil alone is generally not sufficient for control.
	diazinon	---	High	O	petroleum oil	---	Lo	
	methidathion	---	High					

ADDITIONAL INFORMATION:

SOURCES:

1. Proprietary EPA market share information.
2. Peach and Nectarine Pest Management Guidelines. 1996. UCPMG Publication 10. IPM Education and Publications, University of California, Davis.
3. The All-Crop, Quick Reference Insect Control Guide (1997), Meister Publishing Company.
4. Label Use Information System (LUIS) Version 5.0, EPA.

Date: 8/31/98

Site: Peaches
Region: Western (CA)

Pest[1, 2, 3]	Organophosphate[1, 2, 3]	Efficacy	Mkt[1]	Class	Alt. Pesticide List[1, 2, 3]	Efficacy	Mkt[1]	Constraints of Alternatives[2]
Timing: Post-Bloom								
Moth (Oriental fruit) (Major)	azinphos-methyl	---	Med	C	carbaryl	---	Lo	Carbamate and/or Pyrethroid use will kill beneficial insects and may result in other pest problems. Permethrin use requires multiple applications for control. Bt is less effective and/or displays variable effectiveness.
	chlorpyrifos	---	Lo	C	methomyl	---	Lo	
	diazinon	---	Lo	P	esfenvalerate	---	Med	
	malathion	---	Lo	P	permethrin	---	High	
	methidathion	---	Lo	CH	dicofol	---	Lo	
	naled	---	Lo	B	Bacillus thuringiensis	---	Lo	
	methyl parathion	---	High	O	clofentezine	---	Lo	
	phosmet	---	Lo	O	fenbutatin oxide	---	Lo	
				O	formetanate hydrochloride	---	Lo	
				O	pheromone	---	---	
				O	petroleum oil	---	Lo	
				O	propargite	---	Lo	
Borer (Peach twig) (Major)	azinphos-methyl	---	Med	C	carbaryl	---	Lo	Bt requires multiple applications against the Peach twig borer. Carbamates and Pyrethroids may disrupt natural enemies and result in outbreaks of other pests.
	chlorpyrifos	---	Lo	C	methomyl	---	Lo	
	diazinon	---	Lo	P	esfenvalerate	---	Med	
	malathion	---	Lo	P	permethrin	---	High	
	methidathion	---	Lo	P	pyrethrins	---	Lo	
	methyl parathion	---	High	CH	endosulfan	---	Lo	
	naled	---	Lo	B	Bacillus thuringiensis	---	Med	
	phosmet	---	Lo	O	fenbutatin oxide	---	Lo	

Pest Importance: Major = 20+% of all OP usage on pest; Moderate = 5-20% of all OP usage on pest; Minor = <5% of all OP usage on pest
Efficacy Rating: Excellent = ☺ Good = ❍ Fair = ● --- = Not rated for efficacy in state recs.
Market Share: High = 20+% OP usage on pest; Med = 5-20% of all usage on pest; Lo = <5% of all usage on pest; --- = not available for 1994-96.
Insecticides: C = Carbamates; P = Pyrethroids; CH = Chlorinated Hydrocarbons; IGR = Insect Growth Regulators; B = Biological; O = Other pesticide

Site: Peaches
Region: Western (CA)

Pest[1, 2, 3]	Organophosphate[1, 2, 3]	Efficacy	Mkt[1]	Class	Alt. Pesticide List[1, 2, 3]	Efficacy	Mkt[1]	Constraints of Alternatives[2]
Timing: Post-Bloom								
				O	formetanate hydrochloride	---	Lo	
				O	petroleum oil	---	Lo	
				O	propargite	---	Lo	
				O	sulfur	---	Lo	
Scale (Red and San Jose) (Minor)	chlorpyrifos	---	High	C	carbaryl	---	---	Carbamates and Pyrethroids may disrupt natural enemies and result in outbreaks of other pests.
	diazinon	---	High	P	petroleum oil	---	High	
	methidathion	---	High	O	esfenvalerate	---	Med	
	methyl parathion		Lo					

ADDITIONAL INFORMATION:

SOURCES:

1. Proprietary EPA market share information.
2. Peach and Nectarine Pest Management Guidelines. 1996. UCPMG Publication 10. IPM Education and Publications, University of California, Davis.
3. The All-Crop, Quick Reference Insect Control Guide (1997), Meister Publishing Company.
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Insecticides: C = Carbamates; P = Pyrethroids; CH = Chlorinated Hydrocarbons; IGR = Insect Growth Regulators; B = Biological; O = Other pesticide